

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1 – 19 (Canceled).

20. (Currently amended) An extendible exhaust nozzle bell for a rocket engine of an aircraft or spacecraft, comprising:

a first part and a second part, wherein said first part, which has a smaller diameter than said second part, is fixedly arranged on a motor of the rocket engine and said second part is arranged ~~in a flexible manner~~ to be movable with respect to the first part, such that said second part, in a front stowed position, ~~said second part~~ is located to surround said first part and, in a rear operating position, is located to continue the first part;

a closed volume, formed at least in part by a deformable rolling bellows arrangement, ~~acted on by a gaseous fluid, which, such that, when the closed volume is acted on by the a gaseous fluid by enlargement of to enlarge the volume, said first and second parts are structured and arranged to extend~~ said second part is structured and arranged to extend from said front stowed position into said rear operating position; and

~~said closed volume being formed at least in part by a portion of the deformable rolling bellows arrangement coupled between~~ is connected to an external surface of said second part and to a fixed part of one of the rocket engine, the aircraft, or the spacecraft.

21. (Previously presented) The extendible exhaust bell in accordance with claim 20, wherein, when in said front stowed position, said second part is positioned closer to the rocket motor than when in said rear operating position.

22. (Previously presented) The extendible exhaust bell in accordance with claim 20, wherein said rolling bellows arrangement comprises at least one rolling bellows formed essentially in a rotationally symmetrical manner with respect to the longitudinal axis of the rocket engine.

23. (Previously presented) The extendible exhaust bell in accordance with claim 22, wherein said at least one rolling bellows is formed to circulate over an entire circumference of the exhaust nozzle bell.

24. (Previously presented) The extendible exhaust bell in accordance with claim 20, wherein said rolling bellows arrangement comprises:

a first rolling bellows structured and arranged to form a seal for the gaseous fluid that is connected to one of a circumferential area of said first part or another fixed part of the aircraft or spacecraft and to a circumferential area of said second part; and

a second bellows structured and arranged to form a further seal of the volume for the gaseous fluid limited by the said first rolling bellows.

25. (Previously presented) The extendible exhaust bell in accordance with claim 24, wherein said second bellows comprises a sealing bellows that closes a jet opening of said second part and that, together with said first rolling bellows and said first and second parts, is structured and arranged to limit the closed volume acted on by the gaseous fluid inside the exhaust nozzle bell.

26. (Previously presented) The extendible exhaust bell in accordance with claim 25, wherein said circumferential area of said first part to which said first rolling bellows is connected is located on a rear end of said first part, and said

circumferential area of said second part to which said first rolling bellows is connected is located on a front end of said second part.

27. (Previously presented) The extendible exhaust bell in accordance with claim 25, wherein said sealing bellows are structured to include a preset breaking point at which said sealing bellows burst open.

28. (Previously presented) The extendible exhaust bell in accordance with claim 27, wherein said preset breaking point is designed to correspond to the extension of said second part into said operating position in order to clear said jet opening.

29. (Previously presented) The extendible exhaust bell in accordance with claim 24, wherein said second bellows comprises a second rolling bellows connected to a fixed part of the aircraft or spacecraft and to a circumferential area of said second part, which forms a further seal for the gaseous fluid, which lies at least in part radially outside with respect to said first rolling bellows,

whereby said closed volume acted on by the gaseous fluid is located at least in part outside the exhaust nozzle bell and is limited between said first rolling bellows and said second rolling bellows.

30. (Previously presented) The extendible exhaust bell in accordance with claim 29, wherein said circumferential area of said second part to which the second rolling bellows is connected is essentially a same circumferential area of said second part to which said first rolling bellows is connected.

31. (Previously presented) The extendible exhaust bell in accordance with claim 29, wherein said circumferential area of said second part to which said second

rolling bellows is connected is different from said circumferential area of said second part to which said first rolling bellows is connected.

32. (Previously presented) The extendible exhaust bell in accordance with claim 31, wherein said circumferential area of said second part to which said second rolling bellows is connected is located radially outside and to the rear of said circumferential area of said second part to which said first rolling bellows is connected.

33. (Previously presented) The extendible exhaust bell in accordance with claim 20, further comprising a retaining device structured and arranged to brake movement during extension of said second part from said front stowed position into said rear operating position.

34. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device is further structured and arranged to center said second part during said extension from said front stowed position into said rear operating position.

35. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device comprises one or more retaining cables coupled with a cable brake that extend between said second part and a fixed part of the aircraft or spacecraft.

36. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device comprises a retaining bellows that extends between a circumferential area of said first part and a circumferential area of said second part, said retaining device being arranged at a front, with respect to said first rolling

bellows, and together with said first rolling bellows, forms a further closed volume to be acted on with a gaseous fluid.

37. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device comprises a retaining and centering bellows that extends between a circumferential area of said first part and a circumferential area of said second part, said retaining device being arranged at a front, with respect to said first rolling bellows, and together with said first rolling bellows to form the volume, and, when the volume is acted on with the gaseous fluid, and enlargement of the volume causes a braking of the movement during extension of said second part from said front stowed position into said rear operating position.

38. (Previously presented) The extendible exhaust bell in accordance with claim 36, wherein said retaining bellows are fixed to a circumferential area of said second part that is located radially outside said circumferential area of said second part to which said first rolling bellows is connected.

39. (Previously presented) The extendible exhaust bell in accordance with claim 36, wherein said retaining bellows are arranged between said first rolling bellows and said second rolling bellows.

40. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device comprises retaining and centering bellows extending between a front circumferential area of said first part and a front circumferential area of said second part.

41. (Previously presented) The extendible exhaust bell in accordance with claim 33, wherein said retaining device comprises retaining and centering bellows

extending between a rear circumferential area of said first part and a rear circumferential area of said second part.

42. (Previously presented) The extendible exhaust bell in accordance with claim 40, wherein said retaining and centering bellows are structured and arranged to burst or separate.

43. (Previously presented) The extendible exhaust bell in accordance with claim 42, wherein said retaining and centering bellows are structured and arranged to burst or separate at a preset breaking point, which is achieved, at the latest, after said second part is located in said rear operating position.

44. (Previously presented) An extendible exhaust nozzle bell for a rocket engine of an aircraft or spacecraft, comprising:

a first part and a second part, wherein said first part, which has a smaller diameter than said second part, is fixedly arranged on a motor of the rocket engine and said second part is arranged in a flexible manner with respect to the first part, such that, in a front stowed position, said second part is located to surround said first part and, in a rear operating position, is located to continue the first part;

a closed volume acted on by a gaseous fluid, which, when acted on by the gaseous fluid by enlargement of the volume, said first and second parts are structured and arranged to extend said second part from said front stowed position into said rear operating position; and

said closed volume being formed at least in part by a deformable rolling bellows arrangement arranged to an exterior of the first and second parts at least when the second part is located in the rear operating position.

45. (Previously presented) The extendible exhaust nozzle bell in accordance with 44, wherein the deformable bellows are connected to said second part and to a fixed part of one of the rocket engine, the aircraft, or the spacecraft.

46. (Previously presented) An extendible exhaust nozzle bell for a rocket engine of an aircraft or spacecraft, comprising:

a first part and a second part, wherein said first part, which has a smaller diameter than said second part, is fixedly arranged on a motor of the rocket engine and said second part is arranged, such that, in a front stowed position, said second part surrounds said first part and, in a rear operating position, said second part continues the first part; and

a bellows arrangement structured and arranged to move the second part from the front stowed position to the rear operating position,

wherein the bellows arrangement, in at least the rear operating position, is arranged to an exterior of the first and second parts.

47. (Previously presented) The extendible exhaust nozzle bell in accordance with claim 46, wherein the bellows arrangement comprises a first bellow coupled to exteriors of the first and second parts.

48. (Previously presented) The extendible exhaust nozzle bell in accordance with claim 47, wherein the bellows arrangement further comprises a second bellow located exterior to the first and second parts.

49. (Previously presented) The extendible exhaust nozzle bell in accordance with claim 46, wherein the bellows arrangement comprises a bellow located exterior to the first and second parts.